

REMARKS/ARGUMENTS

Applicant thanks Examiner for the detailed Office Action dated December 28, 2006. In response to the issues raised, the Applicant offers the following submissions and amendments.

Amendments

Claim 1 has been amended to delete the features relating to the folds within the flexible membrane of the cartridge storage reservoirs. Claim 1 now highlights the sealed fluid connection with the refill and the printhead, as well as the electrical connection between the refill, the cartridge and the printer controller so that the operation of the printhead can be adjusted in response to the data stored in the cartridge integrated circuit. This is described on page 13, lines 11 to 16.

Accordingly, the amendments do not add any new matter.

Drawings

In light of the amendments to claim 1, this objection is now moot. The term ‘concertina folds’ has been removed from the claims.

Specification

Similarly, the amendments to claim 1 address the antecedent issues raised by the Examiner.

35 U.S.C. §112 – Claim 1

Likewise, the amendments to claim 1 have removed the cause of the enablement rejection.

35 U.S.C. §103 - Claims 1 to 3

Claims 1 to 3 stand rejected as obvious in light of the disclosure in US 6,158,850 to Cook in view of US 5,187,498 to Burger.

Amended claim 1 defines the manner in which the integrated circuit assembly is used to provide the printer’s controller with the information needed to optimize the operation of the printhead. The performance characteristics of the printhead, and the properties of the ink in both the refill and the cartridge itself to customize the control of the printhead. This is not considered in either of the cited documents.

The present invention also provides partially collapsible ink storage reservoirs that are refillable. A collapsible ink storage reservoir prevents exposure of the ink to air which can alter the ink characteristics. Skilled workers will appreciate that dissolved air in ink is problematic because of so-called ‘outgassing’ in the ink feed system to the printhead. However, designing the cartridge such that the collapsible storage reservoir are also refillable significantly extends the operational life of the cartridge. While Cook discloses a refillable cartridge, it is clear that the refilling process requires a headspace of air above the ink in either the cartridge or the refill. It also requires the interface between the refill and the cartridge to have two fluid connections – one for the air and the other for the ink. The

present invention simplifies this to a single connection between an ink storage reservoir and the corresponding refill.

Burger teaches a single use (disposable) ink supply for replenishing the reservoirs of an inkjet printer. While the disposable ink supply stores ink in a collapsible bag, it does not teach any arrangement by which the collapsible bag can be refilled. In fact it is contrary to Burger to suggest a refill for the disposable refill.

In light of the above, it is clear that the cited references fail to teach all the elements of amended claim 1 and in any case, the references do not provide any incentive to combine their teachings.

As discussed above, Cook and Burger do not disclose the features of amended claim 1. Waller also fails to teach a partially collapsible ink storage reservoir that is also refillable.

Accordingly, the combined disclosures of Cook and Burger do not teach the combination of elements defined in amended claim 1 and therefore, they do not anticipate any of claims 1 to 3. It follows that Cook, Burger and Waller also fail to support a §103 rejection of dependent claim 4.

It is respectfully submitted that the Examiner's rejections have been successfully traversed and the application is now in condition for allowance. Accordingly, favorable reconsideration of the application is courteously solicited.

Very respectfully,

Applicant:



Kia Silverbrook

C/o: Silverbrook Research Pty Ltd
393 Darling Street

Balmain NSW 2041, Australia

Email: kia.silverbrook@silverbrookresearch.com

Telephone: +612 9818 6633

Facsimile: +61 2 9555 7762